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**Update age of Hayyan formation which located
in central part of the southern range of
Palmyrides chain, with facies changes
Upon palynological results**

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ABSTRACT

Sediments of Hayyan formation is exist as outcrop in central part the southern range of Palmyrides chain.

Their location at jabal AL - Naqnaqieh, Al-Abtar, Hoshroum, Hayyan and Jabal Al -Mazar.

The Hayyan formation divided in two major parts:

- A- The lower part: consists of clay and marl clayey range color from gray to black gray and intercalations with gypsum and anhydrite beds, at the base of this part contain salt deposits in Jabal Hayyan location
- B- The upper part: consists of thick to massive beds of gypsum with intercalations beds of clay.

The palynological result show that the Hayyan formation related to Middle Triassic (Iadinian) - Upper Triassic (lower Carnian) while it was considered Upper Triassic (Carnian -Norian).

Key words: Palmyrides Chain, Hayyan formation, Jabal Al -Mazar, Triass.

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Ovalipollis cultus KRUTZSCH
Vesicaspora schemeli KLAUS
Lunatisporites acutus LESCHICK
Cedripites microreticulatus ORLOWSKA-ZWOLINSKA
Taeniaesporites sp.
Classopollis torosua
Protohaploxylinus gracilis SAMOILOVICH
Samaropollenites speciosus GOUBIN
Triachispora sp.
Alisporites acutus MADLER
Pityosporites sp
cf. disaccites
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W.A .Brugman eat al 1982 , Bernhard W .Scheuring .,1970
 W.C. and A.O. Tekbali, 1993

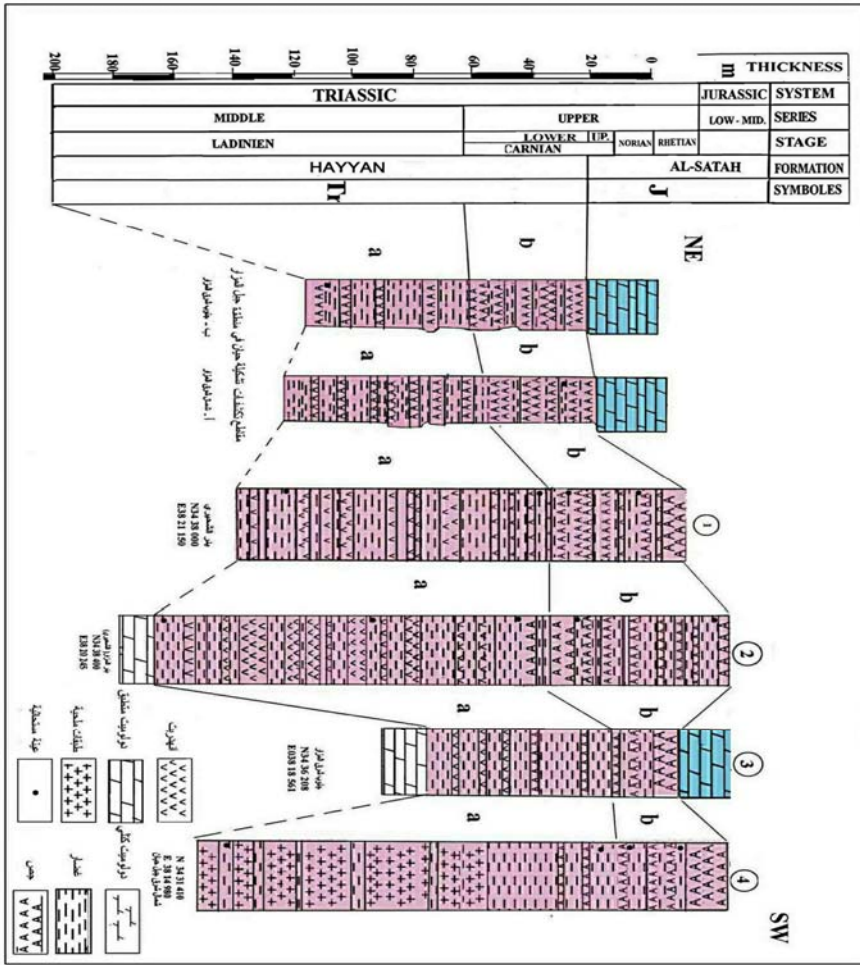
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Alisporites magnus JAIN .
Alisporites sulcatus MADLER.
Illinites sp.
Luecksporites tatboolensis KLAUS.
Lueckisporites hoviavlensis KLAUS.
Purcisporites tenais .
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Triodispora susspicta Scheuring .
Voltyziaceasporites heteromorpha KLAUS.
Vesicaspora cacheutenlis
Triadispora plicata KLAUS
Microcachryidites doubingeri KLAUS
Taeniaesporites acutus MADLER
Protohaplozypincis gracilis SAMOILOVICH
Taeniaesporites pellucidus (GOUBIN& BLAME)
Triadispora obscura KLAUS
Taeniaesporites sp
Samarapollenites sp
 If *Schizosaccua keuperi*
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Bernhard W .Scheuring .,1970 ,
 W.A .Brugman eat al ,1982.
 G.L Van der Eem, 1985,
 W.C. and A.O. Tekbali, 1993,
 Lucas, S.G eat al, 1993.

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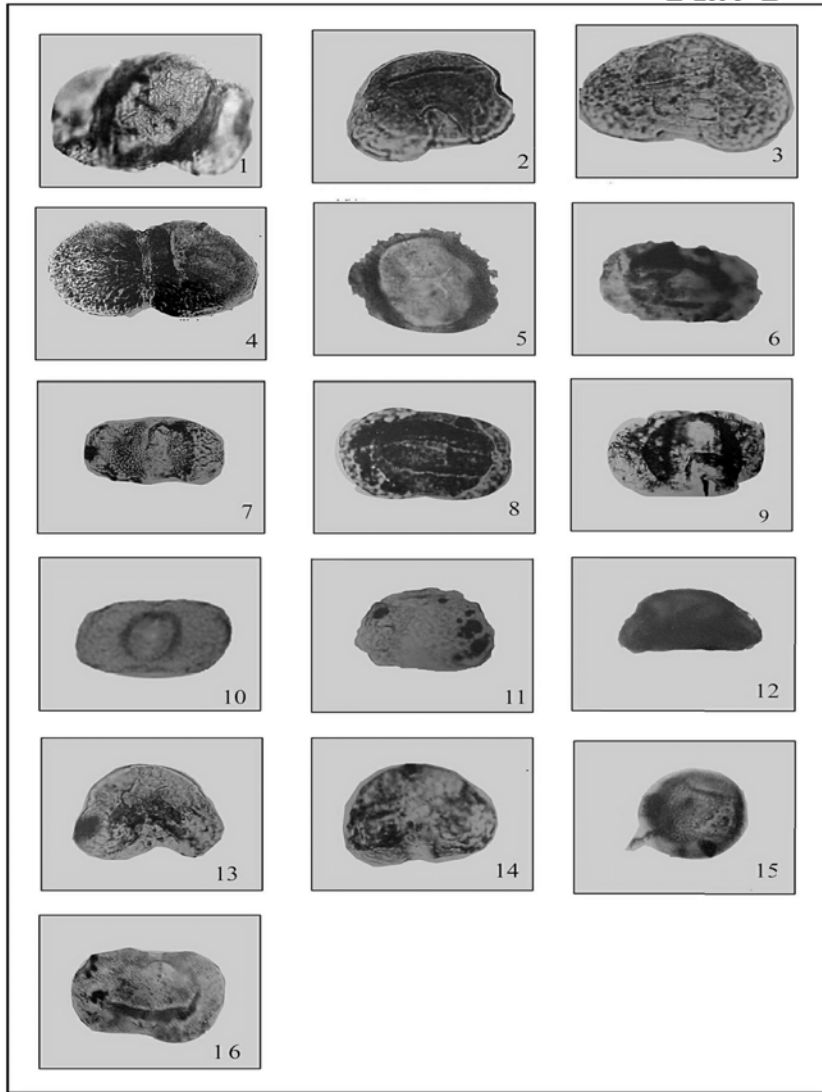
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(2)



(2)

Plat-1



(500× :)

1 - *Triadispora plicata* KLAUS

- 2 - *Microcachrydites doubingeri* ,KLAUS
 3 - *Taeniaesporites acutus* , LESCHIK
 4 - *Playsaccus papilionis* , POTONIE &KLAUS
 5 - *Triadispora obsura*
 6 - *Lueckisporites hoviaulensis* KLAUS
 7 - *Voltyziaceasporites heteromorpha* KLAUS
 8 - *Taeniaesporites pellucidus* ,GOUBIN &BLAME
 9 - *Tarisporites sp*
 10 - *Vesicaspora schemeli* KLAUS
 11 - *Cedripites microreticulatus* , ORLOWSKA-
 ZWOLINSKA
 12 - *Pitysporites sp .*
 13 - *Cf.Disaccites*
 14 - *Samaropollentes speciosus* ,GOUBIN
 15 - *Classopollis sp .*
 16 - *Ovalipollis cultus* KRUTZSCH

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REFERENCES

- Ponikarov, v. p. (1966). The geology of Syria.. Explanatory Note On the geological map of Syria scale 1:200 000 Ministry of Industry, Syrian Arab Republic
- B. R. G. M. (1977). Contract 50 with the Photogeological survey of the eastern palmyrides (final report). Syrian Arab Republic Ministry of Petroleum and Mineral Resources .
- Mouty, M. (1976). presence du Lias dans le Massif Alaouite (Syrie).
- Mouty, M. (1997). Jurassique Des Palmyrides chain Bull. Soc. geol. Fr . P. 182-185
- Mouty, M. and Al-Maleh, K. (1983). The geological study of the Palmyridian chain using ideal geological sections for exploration Purposes and geological survey. General Establishment of Geology and Mineral Resources, Syrian Ministry of Petroleum and mineral Resources, Damascus, Syria, 'Unigeoconsult, no. 140, 4 volumes , 950 p.
- Van der Eem, J. G. L. (1985). Palynological investigations in the Ladinian and lower Karnian of the western Dolomites Italy .
- Bernhard, W. Scheuring. (1970). Palynologische und palynostratigraphische Untersuchungen des keupers im Bolchentunne (solothurner Jura)
- W. A. Brugman et al., (1982). middle Triassic (Miospora and pollen)
- W. C. and A. O. Tekbali. (1993). Age and environmental significance of palynomorphs from the Al Aziziyah Formation, northwest Libya
- Lucas, S. G. and Morales, M. eds., (1993). The Nonmarine Triassic. New Mexico Museum Of Natural History & Science Bulletin No.3, p. 75-93.
- .1976 .